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CENTRAL FAX CENTER

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Response to Non-final Office Action Mailed 11/13/2008

Please replace page 2 of the Specification with the following amended page:

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upstream of the corresponding nozzle, causing blockage thereof and total failure of the microjet reactor.

The present invention was based, therefore, on the object of developing a technically reliable method, which can be used universally, for carrying out chemical and physical operations, especially for preparing organic pigments, with which the products, especially organic pigments, are formed in high quality.

It has been found that the object of the invention can be achieved, surprisingly, through the use of a new swirl chamber reactor, which is described below.

The invention provides a method of carrying out chemical and physical operations, especially for preparing organic pigments or pigment preparations, which comprises spraying two or more liquids or suspensions through two or more nozzles which are not coaxially aligned with one another, at a pressure of between 1 and 1000 bar, preferably from 2 to 500 bar, in particular from 5 to 300 bar, and with a volume flow of between 5 and 500 l/h, preferably between 25 and 400 l/h, and more preferably between 50 and 300 l/h, without the use of a carrier gas stream, into a swirl chamber, thereby inducing turbulent mixing of the liquid phase, with physical alteration, and, after physical alteration has taken place, discharging the liquid phase continuously from the swirl chamber through an outlet aperture without the use of a carrier gas stream.

The two or more, appropriately 2 to 7, nozzles open out into the swirl chamber and are distributed around its internal periphery in such a way that they are not coaxially aligned. The entry angle of the axis of the nozzles, based on the internal generated surface of the swirl chamber, can be between 90° (orthogonal nozzle introduction) and 0° (tangential nozzle introduction). It is further advantageous if the axes of the nozzles are set at an angle of between 0° and 90°, based on the cross-sectional area of the swirl chamber, in opposition to the exit aperture, which is appropriately located at the head of the swirl chamber. The geometry of the swirl chamber can be arbitrary, but advantage is possessed by forms which allow little if any dead space, such as spheres or cylinders, for example, whose base is planar or convexly curved toward the outside.